Orlando, Florida

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

Soil Samples — **March 2008**

Background

The U.S. Army Corps of Engineers is conducting an environmental investigation on the former World War II demonstration range in Orange County previously known as the Pinecastle Jeep Range. As part of the site inspection that was completed in August 2007, the Corps analyzed 18 samples for 42 substances from 16 locations at the site. (See map on reverse side)

These 23-lbs. fragmentation bombs were excavated during removal operations at Odyssey Middle School in January 2008.

Sample Results

What it Means to You

The State of Florida has developed guidelines for acceptable levels of substances in soils indicating that the risk of danger from exposure below those levels is very low. Test results indicate that the soil at the former installation is within the guidelines for residential and commercial use, with the exception of nitroglycerin. Many of these chemicals are naturally occurring and can be found in the soil anywhere in Orange County. In fact, most of the samples contained lower concentrations of metals in the soil at the former installation than in the soil elsewhere in the county. Many samples had only trace amounts of chemicals and metals.

Only one substance (nitroglycerin) was above the acceptable limit for residential property. One soil sample taken in the middle of the bomb target area on property that has not been developed had 44 milligrams per kilogram (mg/kg) of nitroglycerin. Nitroglycerin is widely used to prevent chest pains caused by heart disease, but like all medications, if ingested in excess, can cause negative side effects. The residential level for direct exposure is 27 mg/kg, and the commercial level is 54 mg/kg. Further tests of the soil will evaluate the extent of the contamination and appropriate action will be taken accordingly. The presence of nitroglycerin does not mean that the soil is explosive, but the substance could seep into the ground water. Tests will be conducted to determine if nitroglycerin is in the ground water and, if so, the optimal cleanup process. Since all water in the former Pinecastle area is provided through a regulated utility, the water is safe, and those working and living in the area are not at risk from drinking the water.

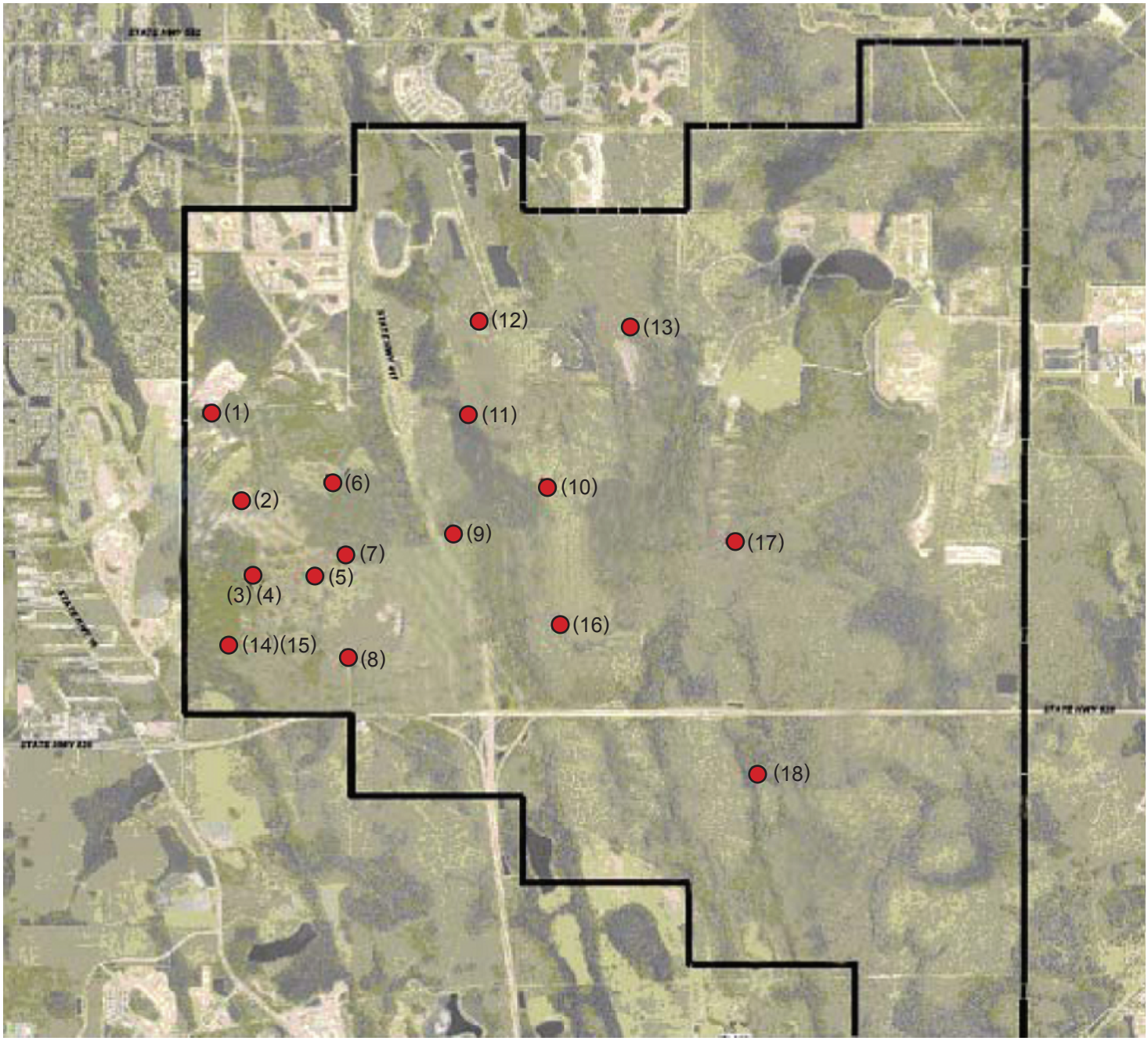
Some residents have asked about the levels of lead and mercury in soil. The lead detected in all of the samples is at levels that are considered safe. The highest lead level detected was 18 mg/kg; the lead level for direct exposure for residential use is 400mg/kg. Mercury is also significantly lower than the level specified for residential use. The highest amount of mercury detected was 0.2 mg/kg, but the upper safe target limit for residential property is 3 mg/kg, and the commercial level is 17 mg/kg.

Substance	Residential Level	Commercial Level	Pinecastle Jeep Range
Lead	400	1400	18
Mercury	3	17	0.2

During the next phase of work, the remedial investigation, more soil sampling will be performed on the former installation. The sample locations will be determined in coordination with the Florida Department of Environmental Protection. Any soil contamination as a result of the military use of the site will be remediated.

Soil Samples

Based on the laboratory analytical results of soil samples, it appears that in spite of the slightly elevated nitroglycerin levels there is no exposure risk from chemicals or hazardous substances in the soils at the former Jeep Range.



The former Pinecastle Jeep Range is located approximately 5 miles east/northeast of the Orlando InternationalAirport. The western portion of the former Pinecastle Range was used by the military primarily for target practice during WWII. The red dots indicate the areas where soil samples were taken. Duplicate samples were taken at 3 and 14.

FOR MORE INFORMATION

Documents are located in the Information Repository:

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